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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/924,312 08/07/01 HARA

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MMC2/1011

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EXAMINER

VO, A

ART UNIT	PAPER NUMBER
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2861
DATE MAILED:

10/11/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/924,312

Applicant(s)

HARA ET AL.

Examiner

ANH VO

Art Unit

2861



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Aug 7, 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-28 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/041,890.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3-4 20) ☐ Other:

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DETAILED ACTION

Acknowledgement is made of the receipt of Preliminary Amendment filed 07 August 2001.

Oath/Declaration

The declaration filed 07 August 2001 is acceptable.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The references cited on PTOL 1449 have been considered.

Drawings Object to

The drawings are objected to in that the recitation "wettability" lacks antecedent basis.

Specification

The specification has been checked to the extent necessary to determine the presence of all possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

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The specification is objected to because the recitation "between more than 20° C" in claim 19 lacks antecedent basis in the specification. Correction is required.

Claims Rejections

Claims Rejections - 35 USC 112.

Claims 21 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Correction or clarification is required.

In claims 21 and 27, the recitation "pallet" is vague and indefinite because it is not related back to the recitation "pallet" in claims 20 and 25.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 20-28 are rejected under 35 USC 102 (b) as being anticipated by Shinada et al. (US Pat. 5,790,158).

Note: The method steps are inherently taught in the apparatus device/limitations in the rejections as follow:

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Shinada et al. disclose in Figures 1-2, 5, and 15a-15b an ink cartridge for use in an ink jet printer comprising:

- a container body (501) providing having a first wall and a plurality of walls extending upwardly therefrom to define an opening spaced from the bottom wall on a pallet, the container body (501) including a chamber (511) for accommodating a porous member (520) therein, and an ink supply port (513), having an inlet formed in the bottom surface of the chamber and an outlet (Figures 15a-15b);
- a packing member (530) inserting into the ink supply port (513) and then sealing the ink supply port outlet (Figures 15a-15b);
- a porous member (520) inserting into the foam chamber (511);
- a cover (516) bonding to the opening of the container body (501);
- ink injecting into the foam chamber (520);
- a filter (525) affixing to the ink supply port inlet.
- the ink being loaded to approximately 200 mm Hg below atmospheric pressure (column 6, lines 42-49)
- the container body inserting into a bag having an opening and sealing the bag opening in a vacuum environment (column 6, lines 49-67).

Claim Rejections - 35-USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior arts are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 16 is rejected under 35 USC 103 (a) as being unpatentable over Shinada et al. (US Pat. 5,790,158) in view of Yamamoto (US Pat. 5,482,660).

Note: The method steps are inherently taught in the apparatus device/limitations in the rejections as follow:

Shinada et al. disclose in Figures 15a-15b an ink cartridge for use in an ink jet printer comprising an ink supply port inlet (513) which is formed in the container body (501).

However, Shinada et al. do not disclose at least a portion of the ink port which is treated with ultraviolet radiation to improve the wettability of the treated portion.

Nevertheless, Yamamoto et al. disclose in Figures 1A-1B an ink jet recording head comprising at least a portion of the ink port (7) which is treated with ultraviolet radiation (28) to improve the wettability of the treated portion (column 6, lines 11-31).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate the teaching of Yamamoto et al. in the Shinada et al. ink jet printer for the purpose of improving ink wettability.

Claims 17-19 are rejected under 35 USC 103 (a) as being unpatentable over Hoisington et al. (US Pat. 4,814,786).

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Hoisington et al. disclose in Figure an ink supply system for supplying a heated ink from an ink reservoir (12) to a head ink cartridge (11) by a heater (52) to desired temperature differences (column 4, lines 48-58).

It is noted that the recitation "an ink is heated, while it is injected into an ink cartridge, to a temperature of at least approximately 10° C and/or 10° C and 20° C and/or between more than 20° C above the ambient temperature of the ink" appears to be as a design expedient for an engineer depending upon particular environment and applications in which the Hoisintong et al. ink supply system to be used for the purpose of maintaining ink in a molten condition. Also, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable range involves only routine skill in the art. *In re Aller*, 105 USPQ 233

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo whose telephone number is (703) 305-8194. The examiner can normally be reached on Tuesday to Friday from 8:00 A.M. to 5:00 P.M.. The fax number of this Group 2800 is (703) 305-3431 or 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



Anh Vo

Patent Examiner-Art Unit 2861

October 6, 2001